

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-022890**Date Inspected:** 20-Apr-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 1500**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** ShangHai, China**CWI Name:** Sha Zhi**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

Summary of Items Observed: On this date Caltrans OSM Quality Assurance(QA) Inspector, DJ Shin was present during the times noted above for observations relative to the work being performed.

**Bay 10**

This QA Inspector observed the following work in progress for Bay 10.

ZPMC was using the Shield Metal Arc Welding (SMAW) process.

ZPMC QC is identified as Shao Hai Lang.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA inspector

Components: Bike Path

PCMK: X3305K-022-001, 002

Welder: 057220

WPS-B-P-2213-TC-U4b

Heat straightening of PCMK, BK010A-001, under approved Heat Straightening procedure, HSR 1 (B)-10188, The in process temperature was at the time of this observation witnessed at less than 600°C. The ZPMC QC was identified as Shao Hai Lang. The approved HSR procedure stated that a maximum temperature of 650°C with 1-3 applications. The distortion that was previously measured and recorded on the HSR was Maximum 5mm.

**Bay 11**

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## WELDING INSPECTION REPORT

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This QA Inspector observed the following work in progress for Bay 11.

ZPMC was using the Shield Metal Arc Welding (SMAW) process.

ZPMC QC is identified as Shi Yu.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA inspector

Components: Tower Lift 6

PCMK: NSD1-TL6-3C/D-11

Welder: 040582

WPS-B-P-2314-TC-P4

PCMK: NSD1-TL6-3C/D-23

Welder: 046364

WPS-B-P-2314-TC-P4

PCMK: NSD1-TL6-3C/D-3, 21

Welder: 040581

WPS-B-P-2314-TC-P4

PCMK: NSD1-TL6-3C/D-6

Welder: 040365

WPS-B-P-2314-TC-P4

PCMK: SSD1-DPSA6-5-11

Welder: 041271

WPS-B-P-2312-TC-P4

Components: Traveler rail

PCMK: 36TR1-001-009

Welder: 044551

WPS-345-SMAW-2G (2F)-Repair

PCMK: 30TR1-001-009

Welder: 044541

WPS-345-SMAW-2G (2F)-Repair

This QA Inspector observed the following work in progress for Bay 11.

ZPMC was using the Submerged Arc Welding (SAW) process.

ZPMC QC is identified as Shi Yu.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA inspector

Components: Tower Lift 6

PCMK: NSD1-TBSA7-3-22

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Welder: 041716

WPS-B-P-2221-TC-U4C-S

PCMK: ESD1-TBSA7-3-19

Welder: 047304

WPS-B-P-2221-TC-U4C-S

Heat straightening of PCMK, 32TR1-002 & 34TR1-001, under approved Heat Straightening procedure, HSR 1 (B)-10255, The in process temperature was at the time of this observation witnessed at less than 600°C. The ZPMC QC was identified as Shi Yu. The approved HSR procedure stated that a maximum temperature of 650°C with 1-3 applications. The distortion that was previously measured and recorded on the HSR was Maximum 5mm.

This QA inspector performed Magnetic Particle Testing (MT) and Visual Inspection (VT) of approximately 15 % of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The member(s) is/are identified as follows; Tower Lift 6 on item number 1~8 of NWIT tracker document # 08880.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



### Summary of Conversations:

No relevant conversations

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

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**Inspected By:** Shin,DJ

Quality Assurance Inspector

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**Reviewed By:** Riley, Ken

QA Reviewer